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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,566	07/26/2002	Priya Gopinath	124320	3231

23413 7590 02/02/2007  
CANTOR COLBURN, LLP  
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BLOOMFIELD, CT 06002

EXAMINER
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LAVIN, CHRISTOPHER L

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/02/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/064,566	GOPINATH ET AL.	
	Examiner	Art Unit	
	Christopher L. Lavin	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/03/06;11/14/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to the applicant's request for information filed on 11/14/06.

#### *Priority*

2. The examiner received the applicant's declaration swearing behind Hong on 04/03/06. Subsequently the examiner sent out a Request for Information on 06/14/06, where the examiner requested further information in reference to one of the exhibits provided by the applicant to prove priority. In particular, the examiner requested more information on the "current calibration processes" cited on page 2 of the Exhibit A. The applicant responded with the following:

Inquiry was made of the three co-inventor Applicants. The Applicants did identify two articles containing information about the "current calibration processes." These articles are cited on the enclosed Information Disclosure Statement and copies are enclosed herein. Applicants submit that they have met the Examiner's requirement as stated in paragraph 3 of the office action.

One of the two articles cited on the IDS is the Hong, "Coronary Artery Calcium: Absolute Quantification in Nonenhanced and Contrast-enhanced Multi-Detector Row CT Studies", reference which the applicant provided the Declaration to overcome in the 04/03/06 response. The applicant's most recent response now leaves some confusion as to whether the applicant has overcome the Hong reference or not. Exhibit A was used to show that the inventors established conception of the device and diligent reduction to practice prior to May 1, 2002. However, Exhibit A on page 2 makes

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references to "current calibration processes" which the applicant has identified as Hong (Published May 2002). For the Exhibit A to make reference to Hong, Hong would have to have been published before Exhibit A was written. Thus Exhibit A had to be written after May 2002. Unless Hong published a similar paper on an early date, in which case the examiner requests a copy of this paper. In any case, the examiner would like to request clarification on the applicant's priority claim. Until such clarification is provided the examiner will maintain the previous rejections provided in the first office action dated 10/04/05.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 – 5, 8, 9, and 15 – 28 are rejected under 35 U.S.C. 102(a) as being anticipated by Hong ("Coronary Artery Calcium: Absolute Quantification in Nonenhanced and Contrast-enhanced Multi-Detector Row CT Studies", Radiology, volume 223, pages 474-480, May 2002).

Claims 1 – 5, 8, 9, and 15 – 25 are rejected for the same reasons as provided in the first office action dated 10/04/05.

In regards to claim 26, claim 26 is rejected for the same reasons as claim 1. The argument similar to that presented above for claim 1 is applicable to claim 26. Claim 26 distinguishes from claim 1 only in that it recites that the calibration curve equation is

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responsive to the size of the patient. Hong discloses a calibration process that is responsive to the size of the calibration phantom. Which is how the applicant's invention is response to the size of the patient, as disclosed in the specification.

In regards to claim 27, claim 27 is rejected for the same reasons as claim 1. The argument similar to that presented above for claim 1 is applicable to claim 27. Claim 27 distinguishes from claim 1 only in that it recites that the calibration curve equation is responsive to scan parameters. Hong determines the calibration data using CT images. These CT images are based on scan parameters; therefore the curve equation is responsive to scan parameters.

In regards to claim 28, claim 28 is rejected for the same reasons as claim 1. The argument similar to that presented above for claim 1 is applicable to claim 28. Claim 28 distinguishes from claim 1 only in that it recites that the calibration curve equation is responsive to CT number drift. Hong determines the calibration data using CT images. These CT images are affected by CT number drift; therefore the curve equation is responsive to CT number drift.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of Arnold (4,922,915).

Please see the rejection dated 10/04/05.

6. Claims 10 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of Arnold and Feldman.

Please see the rejection dated 10/04/05.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Lavin whose telephone number is 571-272-7392. The examiner can normally be reached on M - F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Lavin



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